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NOTICE OF ALLOWANCE AND FEE(S) DUE

30827 7590 05/18/2009 MCKENNA LONG & ALDRIDGE LLP 1900 K STREET. NW

WASHINGTON, DC 20006

EXAMINER

RUDE, TIMOTHY L

ART UNIT PAPER NUMBER

2871

DATE MAILED: 05/18/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901.079	07/10/2001	Dong-Hoon Lee	8733,464,00	7082

 $\hbox{ TITLE OF INVENTION: IN-PLANE SWITCHING LIQUID CRYSTAL DISPLAY DEVICE AND METHOD FOR FABRICATING THE SAME \\$

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/18/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
30827 7590 05/18/2009 MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006					Cer	rtificat	e of Mailing or Trans	mission g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.
				Г				(Depositor's name)
								(Signature)
								(Date)
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09/901.079	07/10/2001			Dong-Hoon Lee		_	8733,464,00	7082
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nonprovisional	NO		\$1510	\$300	\$0		\$1810	08/18/2009
EXAMI	NER		ART UNIT	CLASS-SUBCLASS				
RUDE, TIM	OTHY L		2871	349-141000				
1. Change of corresponder CFR 1.363. Change of corresponder CFR 1.363. The change of corresponder CFR 1.363. "Fee Address" indic PTO/SBA97; Rev 03-02 Number is required. 3. ASSIGNEE NAME AN PLEASE NOTE: Unler recordation as set forth (A) NAME OF ASSIG	ndence address (or Cha 122) attached. ation (or "Fee Address" or more recent) attach D RESIDENCE DATA ss an assignee is identi in 37 CFR 3.11. Comp	nge of ' ' Indicated, Use ' TO B	Correspondence ation form e of a Customer E PRINTED ON		to 3 registered pater tively, gle firm (having as a agent) and the nan torneys or agents. If he printed. type) patent. If an assign assignment.	nt attorn a memb nes of u no nan	per a 2	ocument has been filed for
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4a. The following fee(s) are submitted: 4b. Payment of Fee(s) ☐ Issue Fee ☐ A check is encle						ny pre-	viousty paid issue fee	snown above)
☐ Publication Fee (No small entity discount permitted) ☐ Payment b				Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any				
Advance Order - # of Copies			overpayment, to De	by authorized to cha posit Account Numb	rge the er	required fee(s), any de (enclose a	n extra copy of this form).	
5. Change in Entity Statu a. Applicant claims	SMALL ENTITY statu	s. See	37 CFR 1.27.	☐ b. Applicant is no lo				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requested of the United Sta	iired) v tes Pate	vill not be accepted ent and Trademark	d from anyone other than Office.	the applicant; a reg	istered	attorney or agent; or th	ne assignee or other party in
Authorized Signature				Date				
Typed or printed name				Registration No				
This collection of informat an application. Confidenti- submitting the completed this form and/or suggestio Box 1450, Alexandria, Vir Alexandria, Virginia 2231	tion is required by 37 C slity is governed by 35 application form to the ns for reducing this bur ginia 22313-1450. DC 3-1450.	FR 1.3 U.S.C. USPT den, st NOT	11. The informatic 122 and 37 CFR O. Time will vary tould be sent to the SEND FEES OR	on is required to obtain o 1.14. This collection is a depending upon the inc e Chief Information Offi COMPLETED FORMS	retain a benefit by estimated to take 12 ividual case. Any co cer, U.S. Patent and TO THIS ADDRES	the pub minute ommen Trader S. SEN	lic which is to file (and s to complete, including ts on the amount of timerk Office, U.S. Dep D TO: Commissioner	d by the USPTO to process) ag gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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09/901,079	07/10/2001	Dong-Hoon Lee	8733.464.00	7082
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MCKENNA LO	NG & ALDRIDGE I	RUDE, TIMOTHY L		
1900 K STREET,		ART UNIT	PAPER NUMBER	
WASHINGTON.	DC 20006			

DATE MAILED: 05/18/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 876 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 876 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 09/901.079 LEE ET AL. Notice of Allowability Examiner Art Unit TIMOTHY RUDE 2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included ve

nerewith (or previously mailed), a Notice of Allowance (PTOL-85) or oth NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS of the Office or upon petition by the applicant. See 37 CFR 1.313 and N	 This application is subject to withdrawal from issue at the initiati
 This communication is responsive to <u>Board decision mailed 06 F</u> 	ebruary 2009.
2. The allowed claim(s) is/are 1-10,15-24 and 29-36.	
 Acknowledgment is made of a claim for foreign priority under 3: a)	received.
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this noted below. Failure to timely comply will result in ABANDONMENT (THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	
 A SUBSTITUTE OATH OR DECLARATION must be submitted. I INFORMAL PATENT APPLICATION (PTO-152) which gives reas 	
CORRECTED DRAWINGS (as "replacement sheets") must be s (a) including changes required by the Notice of Draftsperson's F 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Ame Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c))	Patent Drawing Review (PTO-948) attached and and a review of the Additional
each sheet. Replacement sheet(s) should be labeled as such in the hee 5. DEPOSIT OF and/or INFORMATION about the deposit of attached Examiner's comment regarding REQUIREMENT FOR 1	BIOLOGICAL MATERIAL must be submitted. Note the
Attachment(s) .	Notice of Informal Patent Application Intension Summery (PTC-413).
3. ☐ Information Disclosure Statements (PTO/SB/08).	Paper No./Mail Date
Paper No./Mail Date	X Examiner's Statement of Reasons for Allowance
of Biological Material	9 Other

/TIMOTHY RUDE/ Primary Examiner, Art Unit 2871

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Eric J. Nuss on 11 May 2009.

The application has been amended as follows:

Claim 1 is amended (near the end of the claim) to replace "exposing" with

-- for --, resulting in ... wherein the first passivation layer and the second passivation
layer include a drain contact hole <u>for</u> a drain electrode,

Claim Objections

Objection to claim 1 is withdrawn.

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Allowable Subject Matter

Claims 1-10, 15-24, and 29-36 are allowed.

The following is an examiner's statement of reasons for allowance:

Please see Board decision mailed 06 February 2009.

The closest combination is Applicant's Admitted Prior Art (APA) in view of Sakamoto et al (Sakamoto) USPAT 6,507,382 B1 and Kim USPAT 5,581,382.

APA discloses an in-plane switching liquid crystal display device comprising:

first and second substrates, 30 and 32 respectively;

- a gate line, 50, arranged in one direction on the first substrate;
- a common line, 54, arranged on the first substrate;
- a gate insulation layer, 70, on the first substrate;
- a data line, 62, on the gate insulation layer;
- a first passivation layer, 74, on the gate insulation layer, and a plurality of common

electrodes, 54a, an insulating layer over the common electrodes, and a plurality of pixel

electrodes, 66a, on said insulating layer, wherein the plurality of common electrodes

and the plurality of pixel electrodes are parallel to and [Applicant's "an"] space apart

from each other; and

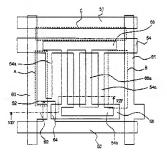
Application/Control Number: 09/901,079
Art Unit: 2871

a liquid crystal layer between the first and second substrates..

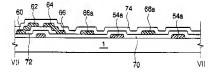
Sakamoto teaches (entire patent, especially embodiment 2) in Drawings 3(a) and 3(b), the use of a gate insulating layer, 4, on the substrate, a common electrode, 3 (col. 8, line 23 through col. 10, line 7), on a protective overcoat layer, 12 (Applicant's the first passivation layer); an interlayer film, 13 (Applicant's second passivation layer) on the first passivation layer that includes a contact hole for connecting the pixel electrode (per Figure 3(b)); a pixel electrode, 14, on the second passivation layer; and wherein 12, 13, and 8 (Applicant's first passivation layer, second passivation layer, and an insulating protection film, respectively) includes a drain contact hole to electrically connect the pixel electrode to the drain (per Figure 3(B)) to allow for manufacture of a color display that prevents color unevenness for better display performance (col. 4, lines 1-2).

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APA, Figure 6:



APA, Figure 7D:



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Sakamoto:

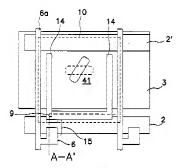
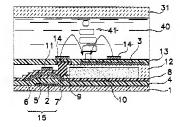


FIG. 3(a)



Kim teaches a device wherein the second passivation layer is a nitride layer (Applicant's inorganic material) to prevent moisture penetration and resulting damage due to said moisture penetration (improves display service life) (col. 5, lines 30-48).

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However, no prior art with proper motivation to combine was found to teach the missing limitations in the device as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY RUDE whose telephone number is (571)272-2301. The examiner can normally be reached on Increased Flex Time Program.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nelms C. David can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TIMOTHY RUDE/ Primary Examiner, Art Unit 2871